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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,050	04/04/2005	Moriharu Sakai	033498-045	5526
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EXAMINER				
BURCH, MELODY M				
ART UNIT		PAPER NUMBER		
3683				
NOTIFICATION DATE		DELIVERY MODE		
03/14/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

**Application No.**

10/530,050

**Applicant(s)**

SAKAI ET AL.

**Examiner**

Melody M. Burch

**Art Unit**

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-499850 (JP'850).

Re: claim 1. JP'850 shows in figures 1 and 2 a hybrid vehicle slip stop device comprising: a plurality of different types of slip stop means element 5 and element 4 for preventing slip of the vehicle by increasing the frictional resistance relative to a road surface on which the vehicle is traveling, wherein each of the plurality of different types of slip stop means other than a conventional brake system and performs the function of preventing slip of the vehicle by itself and independently of the other slip stop means. Examiner notes that slip stop means 4 is independently actuated using element 7.

Re: claim 3. JP'850 shows wherein the plurality of different types of slip stop means are provided for the same one tire, as broadly recited, since the stopping action of element 5 slows down the vehicle overall which provides a stopping effect on the tire with which element 4 is associated.

Re: claims 4-6, 8, and 10. As broadly recited, the vehicle operator of JP'850 may be considered to be the selection means and the controller.

Re: claim 9. JP'850 shows in figure 1 the selection switch 7.

3. Claims 1-4, 6-9, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-08025905 (JP'905).

Re: claims 1, 3, 6 and 20. JP'905 disclose a hybrid vehicle slip stop device comprising: a plurality of different types of slip stop means, large quantities of grains 2-2 and small quantities of grains 2-2 depending on the measured coefficient of friction for preventing slip of the vehicle by increasing the frictional resistance relative to a road surface on which the vehicle is traveling, wherein each of the plurality of different types of slip stop means other than a conventional brake system and performs the function of preventing slip of the vehicle by itself and independently of the other slip stop means.

Re: claims 2, 7, and 8. JP'905 shows in the figures a single controller 6 for actuating each of the plurality of slip stop means and a road surface condition detecting means or the means that determines the coefficient of friction as disclosed in the English abstract lines 8-9 of the Constitution section.

Re: claims 4 and 9. JP'905 discloses a selection means or steering wheel for allowing a user to select and activate at least one of the plurality of different types of slip stop means by steering the vehicle onto a low  $\mu$  surface to thereby activate the large quantity of grain slip stop means.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'905 in view of US Patent 5018797 to Takata.

JP'905 describes the invention substantially as set forth above, but lacks the limitation of comparing a stepping force on a brake pedal and a deceleration of a vehicle to effect actuation of the slip stop means.

Takata teaches in col. 9 lines 22-25 the use of comparing the force on a brake pedal to the deceleration of a vehicle to determine a particular braking response.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake control scheme of JP'905 to have included comparing the force on a brake pedal to the deceleration of a vehicle, as taught by Takata, in order to provide a means of determining when brake control should be triggered to improve vehicle stability.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'905 in view of US Patent 4318624 to Jett.

JP'905 lacks the limitation of the controller being configured to monitor the amount of slip preventive material remaining in the container.

Jett teaches in col. 1 lines 5-8 the use of a controller used to monitor the amount of slip preventive material remaining in a container.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of JP'905 to have included a means to monitor the amount of slip preventative material remaining in the container, as taught by Jett, in order to provide a means of quickly determining when refilling should occur.

7. Claims 13-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'905 in view of US Patent 4613015 to Skrzypek.

JP'905 discloses a slip stop means or small quantity of grains, the container of which, mounted on the vehicle for preventing slip of the vehicle by increasing the frictional resistance relative to a road surface on which the vehicle is traveling, the slip stop means being of a type that is other than a conventional brake system and is different from a another slip stop means, each of the other slip stop means and the slip stop means performing the function of preventing slip of the vehicle by itself and independently of one another, and a single controller 6 for selecting and actuating each of the another slip stop means and the slip stop means according to a predetermined condition.

JP'905 lacks the limitation of the other slip stop means specifically being a movable plate.

Skrzypek teaches in col. 3 lines 47-55 the use of a plate as a form of slip stop means.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the other slip stop means or large quantity of grains of JP'905 to have included a movable plate, as taught by Skrzypek, in order to provide a greater slip stopping means in order to help prevent a collision.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'905 in view of US Patent 4613015 to Skrzypek, as applied to claim 13 above, and further in view of JP-09193604 (JP'604).

JP'905, as modified, describes the invention substantially as set forth above, but lacks the limitation of an accumulator.

JP'604 teaches in figure 1 the use of a container 16R containing slip preventive material and a nozzle 10R connected to the container and further comprising an accumulator 22,24 connected to the nozzle by way of at least one valve 20R, the accumulator comprising pressurized gas.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the slip stop means dispensing means of JP'905, as modified, to have included the accumulator, as taught by JP'604, in order to provide a means of effectively distributing the slip stop material.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'905 in view Skrzypek as applied to claim 13 above, and further in view of US Patent 5018797 to Takata.

JP'905, as modified, describes the invention substantially as set forth above, but lacks the limitation of comparing a stepping force on a brake pedal and a deceleration of a vehicle to effect actuation of the slip stop means.

Takata teaches in col. 9 lines 22-25 the use of comparing the force on a brake pedal to the deceleration of a vehicle to determine a particular braking response.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake control scheme of JP'905, as modified, to have included comparing the force on a brake pedal to the deceleration of a vehicle,

as taught by Takata, in order to provide a means of determining when brake control should be triggered to improve vehicle stability.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5010982 to Sedlmayr teach the use of different slip stop means – chains and dispensed gravel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Art Unit: 3683

mmb

March 1, 2008

/Melody M. Burch/

Primary Examiner, Art Unit 3683